Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A compound according to Formula I,

or a pharmaceutically acceptable salt, hydrate, or prodrug thereof, wherein,

- B, D, and E are each independently either =N- or = $C(R^2)$ -, provided at least one of B, D, and E is =N-:
- at each occurance, each of R¹, R², and R³ is independently selected from -H, halogen, trihalomethyl, -CN, -NO₂, -OR⁵, -N(R⁵)OR⁵, -ON(R⁵)R⁵, -N(R⁵)N(R⁵)R⁵, -N(R⁵)R⁵, -S(O)₀₋₂R⁵, -SO₂N(R⁵)R⁵, -CO₂R⁵, -CO₂R⁵, -CO₃N⁵, -N(R⁵)SO₂R⁵, -N(R⁵)C(O)R⁵, -C(=NR⁷)N(R⁵)R⁵, -C(=NR⁷)R⁵, -C(=NR⁷)R⁵, -C(=NR⁷)R⁵, -C(=NR⁷)N(R⁵)R⁵, -C(=NR⁷)N(R⁵)R⁵, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, and optionally substituted arylalkyl;

n is zero to five;

R⁴ is selected from -H, halogen, -CN, -NO₂, -N(R⁵)OR⁵, -ON(R⁵)R⁵, -N(R⁵)N(R⁵)N(R⁵)R⁵, -OR⁵,
-N(R⁵)R⁵, -S(O)₀₋₂R⁵, -SO₂N(R⁵)R⁵, -CO₂R⁵, -CO₂R⁵, -C(O)N(R⁵)R⁵, -N(R⁵)SO₂R⁵,
-N(R⁵)C(O)R⁵, -N(R⁵)CO₂R⁵, -C(O)R⁵, -C(=NR⁷)N(R⁵)R⁵, -C(=NR⁷)R⁵, -C(=NR⁷)N(R⁵)R⁵, -C(=NR⁷)N(R⁵)R⁵, optionally substituted lower alkenyl, optionally substituted heterocyclylalkyl, and optionally substituted arylalkyl:

- R^2 and R^3 , together with the atom or atoms to which they are attached, can combine to form a three- to seven-membered optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted cycloalkyl;
- R² and R⁴, together with the atom or atoms to which they are attached, can combine to form a three- to seven-membered optionally substituted heterocyclyl, optionally substituted aryl, or optionally substituted cycloalkyl;
- each R^5 is independently selected from -H, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted lower arylalkyl, optionally substituted heterocyclyl, optionally substituted lower heterocyclylalkyl, and a single bond to an atom of R^1 :
- two of R⁵, together with the atom or respective atoms to which they are attached, can combine to form an optionally substituted three- to seven-membered heterocyclic;
- R^5 and R^6 , together with the atom or atoms to which they are attached, can combine to form a five- to seven-membered optionally substituted heterocyclyl;
- R⁵ and R⁷, together with the atom or atoms to which they are attached, can combine to form a five- to seven-membered optionally substituted heterocyclyl;
- each of X and Y is independently selected from -C(=O)-, -C(R⁶)R⁶-, -O-, -N(R⁵)-, -C(=NR⁷)-, and -S(O)₀₋₂-; provided when X is -O- or -N(R⁵)-, then Y cannot be -C(H)R^{6a}-, where R^{6a} is -C(R²⁰)(R²¹)R²² wherein at least one of R²⁰, R²¹ and R²² is selected from phenyl, napthyl, cyclohexyl, dihydronapthyl tetrahydronapthyl, and a five- to six-membered heteroaryl, each optionally substituted;
- or X and Y can combine to form either $-C(R^6)=C(R^6)$ or -C=C-;
- Z is selected from O, S, and a double bond to an atom of R1;
- A is either -N(R⁵)- or a single bond;
- each R^6 is independently selected from -H, halogen, trihalomethyl, -CN, -NO₂, -NH₂, -OR⁵, -N(R⁵)R⁵, -S(O)₀₋₂R⁵, -SO₂N(R⁵)R⁵, -CO₂R⁵, -CO₂R⁵, -CO₃R⁵, -N(R⁵)SO₂R⁵, -N(R⁵)CO₂R⁵, -COO)R⁵, optionally substituted lower alkyl, optionally substituted arvl. optionally substituted heteroevelyl. optionally substituted

- heterocyclylalkyl, optionally substituted arylalkyl, and a single bond to an atom of R^2 of D or E when said either D or E is $=C(R^2)$ -;
- two of R^6 , together with the atom or atoms to which they are attached, can combine to form one of an optionally substituted three to seven-membered alicylic, an optionally substituted three to seven-membered heteroalicylic, and a double bond to an atom of R^2 of D or E when said either D or E is $=C(R^2)$ -;
- each R⁷ is independently selected from -H, -CN, -NO₂, -N(R⁵)R⁵, -OR⁵, -S(O)_{0.2}R⁵, -SO₂N(R⁵)R⁵, -CO₂R⁵, optionally substituted lower alkenyl, optionally substituted lower alkenyl, optionally substituted lower alkenyl, and a single bond to a carbon of J: and
- J is selected from an optionally substituted five- to ten-membered aryl and an optionally substituted five- to ten-membered heteroaryl;
- provided the compound is not one of: 2-(2-amino-5-cyano-6-methylsulfanyl-pyrimidin-4ylsulfanyl)-N-(3-trifluoromethyl-phenyl)-acetamide, 2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[3-(butyloxy)phenyl]acetamide, 2-{[2-amino-5-cvano-6-(methylthio)pyrimidin-4-yllthio}-N-1,3-benzothiazol-2-ylacetamide, 2-{[2-amino-5cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-(5-ethyl-1,3,4-thiadiazol-2-yl)acetamide, 2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-(4-methyl-1,3-thiazol-2-2-amino-4-{[2-(3,5-dimethyl-1H-pyrazol-1-yl)-2-oxoethyl]thio}-6vl)acetamide. (methylthio)pyrimidine-5-carbonitrile, 2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4vl]thio}-N-1,3-thiazol-2-vlacetamide, 2-(5-cvano-2-methylsulfanyl-pyrimidin-4ylsulfanyl)-N-phenyl-acetamide, 5-amino-2-methylsulfanyl-thieno[2,3-d]pyrimidine-6carboxylic acid phenylamide, 2-(6-amino-5-cyano-2-methylsulfanyl-pyrimidin-4vlsulfanvl)-N-phenvl-acetamide. 4.5-diamino-2-(2-methoxy-ethoxy)-thieno[2,3dlpvrimidine-6-carboxylic acid phenylamide. 2-(5-cvano-6-phenyl-2phenylcarbamoylmethylsulfanyl-pyrimidin-4-ylsulfanyl)-N-phenyl-acetamide, and a 2-(6-amino-3,5-dicyano-pyridin-2-ylsulfanyl)-N-phenyl-acetamide derivative.
- (original) The compound according to claim 1, wherein J is either a six-membered aryl or a five- to six-membered heteroaryl.
- 3. (original) The compound according to claim 2, wherein D is $=C(R^2)$ -.

- (original) The compound according to claim 3, wherein R⁴ is -N(R⁵)R⁵.
- 5. (original) The compound according to claim 4, of Formula II.

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wherein, R1, R2, R3, R5, n, B, E, X, and Y are as defined above; and Q is either =N- or =C(H)-.

- (original) The compound according to claim 5, wherein R^{2a} is selected from halogen, -CN, -C(=O)N(R⁵)R⁵, -CF₃, -CO₂R⁵, -C(R⁵)=C(R⁵)R⁵, -C=C-R⁵, and -NO₂;
- (original) The compound according to claim 6, wherein at least one of R^{5a} and R^{5b} is -H.
- 8. (original) The compound according to claim 7, wherein R^3 is selected from $-OR^5$, $-NR^5R^5$, and $-S(O)_{0\cdot2}R^5$.
- 9. (original) The compound according to claim 8, wherein at least one of B and E is =N-.
- 10. (original) The compound according to claim 9, wherein R^1 is selected from halogen, $-OR^5$, $-NR^5R^5$, $-S(O)_{0.2}R^5$, $-NO_{2}$, perhaloalkyl, optionally substituted lower alkyl, optionally substituted aryl, and optionally substituted aryl, and optionally substituted arylalkyl.
- 11. (original) The compound according to claim 10, wherein R^1 is selected from halogen, $-OR^5$, $-NR^5R^5$, $-S(O)_{0-1}R^5$, $-NO_2$, perhaloalkyl, and optionally substituted lower alkyl.
- 12. (original) The compound according to claim 11, wherein A is -N(R⁵)-.
- 13. (original) The compound according to claim 12, of Formula III,

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- wherein, R^3 , R^5 , X, Y, and Q are as defined above; R^{1a} is selected from halogen, lower perfluoroalkyl, -NO₂, -OR 5 , and optionally substituted $C_{1.4}$ alkyl; and R^{1b} is selected from halogen, -OR 5 , -N(R^5) R^5 , -SR 5 , perfluoroalkyl, and optionally substituted lower alkyl.
- 14. (original) The compound according to claim 13, wherein R^{1a} is selected from -NO₂, halogen, perfluoroalkyl, haloalkyl, optionally substituted $C_{1\cdot2}$ alkyl, and optionally substituted -O- $C_{1\cdot2}$ alkyl.
- 15. (original) The compound according to claim 14, wherein R^3 is selected from optionally substituted -O-C₁₋₄alkyl, -O-C₁₋₄perfluoroalkyl, optionally substituted -N(H)C₁₋₄alkyl, optionally substituted -N(C₁₋₄alkyl, and optionally substituted -S(O)₀₋₂-C₁₋₄alkyl, and optionally substituted -S(O)₀₋₂-C₁₋₄perfluoroalkyl.
- 16. (original) The compound according to claim 15, wherein Y is either -N(H)- or -C(R⁶)R⁶-.
- (original) The compound according to claim 16, wherein X is selected from -O-, -N(R⁵)and -S-.
- 18. (original) The compound according to claim 17, wherein Y is $-C(R^6)R^6$; wherein each R^6 is independently selected from -H, halogen, trihalomethyl, -NH₂, optionally substituted -O-C₁. $_4$ alkyl, optionally substituted -N(H)C₁₋₄alkyl, optionally substituted -S-C₁₋₄alkyl, optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.
- 19. (original) The compound according to claim 18, wherein Y is -C(H)R 6 ; wherein R 6 is independently selected from -H, halogen, trihalomethyl, -NH₂, optionally substituted -O-C₁- $_4$ alkyl, optionally substituted -N(H)C₁₋₄alkyl, optionally substituted -S-C₁₋₄alkyl, optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.
- 20. (original) The compound according to claim 19, wherein Q is =C(H)-.
- 21. (original) A compound according to Formula IV,

or a pharmaceutically acceptable salt, hydrate, or prodrug thereof, wherein,

R¹ is selected from halogen, -OR⁵, -N(R⁵)R⁵, -S(O)₀₋₂R⁵, -NO₂, -C(O)R⁵, perhaloalkyl, optionally substituted lower alkyl, optionally substituted aryl, and optionally substituted arylalkyl.

n is zero to five;

- R^2 is selected from halogen, -CN, -C(=O)N(R^5) R^5 , -CF₃, -CO₂ R^5 , -C(R^5)=C(R^5) R^5 , -C=C- R^5 , and -NO₂;
- R³ is selected from -H, halogen, trihalomethyl, -CN, -NO2, -OR5, -N(R5)OR5, -ON(R5)R5, -N(R5)N(R5)R5, -N(R5)NR5, -N(R5)NR
- $R^4 \quad is \ \, selected \ \, from \ \, -CN, \ \, halogen, \ \, -NQ_5, \ \, -N(R^5)QR^5, \ \, -ON(R^5)R^5, \ \, -N(R^5)N(R^5)R^5, -QR^5, \\ -N(R^5)R^5, -SQ_2N(R^5)R^5, -C(O)N(R^5)R^5, -C(=NR^7)N(R^5)R^5, -C(=NR^7)R^5, -C(=NR^7)QR^5, \\ -N(R^5)C(=NR^7)N(R^5)R^5, \ \, optionally \ \, substituted \ \, lower \ \, alkyl, \ \, optionally \ \, substituted \\ \, heterocyclyl, and optionally substituted heterocyclylalkyl; \label{eq:constraints}$
- each R⁵ is independently selected from -H, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted lower arylalkyl, optionally substituted heterocyclyl, and optionally substituted lower heterocyclylalkyl;
- two of R⁵, together with the atom or respective atoms to which they are attached, can combine to form an optionally substituted three- to seven-membered heterocyclic;

- R⁵ and R⁶, together with the atom or atoms to which they are attached, can combine to form a five- to seven-membered optionally substituted heterocyclyl;
- R⁵ and R⁷, together with the atom or atoms to which they are attached, can combine to form a five- to seven-membered optionally substituted heterocyclyl;
- each of X and Y is independently selected from -C(=O)-, -C(R⁶)R⁶-, -O-, -N(R⁵)-, -C(=NR⁷)-, and -S(O)₀₋₂-; provided when X is -O- or -N(R⁵)-, then Y cannot be -C(H)R^{6a}-, where R^{6a} is -C(R²⁰)(R²¹)R²² wherein at least one of R²⁰, R²¹ and R²² is selected from phenyl, napthyl, cyclohexyl, dihydronapthyl tetrahydronapthyl, and a five- to six-membered heteroaryl, each optionally substituted;
- or X and Y can combine to form either $-C(R^6)=C(R^6)$ or -C=C-;
- each R⁶ is independently selected from -H, halogen, trihalomethyl, -CN, -NO₂, -NH₂, -OR⁵,
 -N(R⁵)R⁵, -S(O)₀₋₂R⁵, -SO₂N(R⁵)R⁵, -CO₂R⁵, -CO₂R⁵, -CO₃N(R⁵)R⁵, -N(R⁵)SO₂R⁵,
 -N(R⁵)C(O)R⁵, -N(R⁵)CO₂R⁵, -C(O)R⁵, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, optionally substituted arylalkyl, and a single bond to an atom of R¹;
- two of R⁶, together with the atom or atoms to which they are attached, can combine to form either an optionally substituted three to seven-membered alicylic or an optionally substituted three to seven-membered heteroalicylic;
- each R⁷ is independently selected from -H, -CN, -NO₂, -N(R⁵)R⁵, -OR⁵, -S(O)₀₋₂R⁵, -SO₂N(R⁵)R⁵, -CO₂R⁵, optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, and a single bond to a carbon of J; and
- J is selected from an optionally substituted five- to ten-membered aryl and an optionally substituted five- to ten-membered heteroaryl;
- provided the compound is not one of: 2-(2-amino-5-cyano-6-methylsulfanyl-pyrimidin-4-ylsulfanyl)-N-(3-trifluoromethyl-phenyl)-acetamide, 2-{[2-amino-5-cyano-6-(methyl-thio)pyrimidin-4-yl]thio}-N-[3-(butyloxy)phenyl]acetamide, 2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[3-benzothiazol-2-ylacetamide, 2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[3-4-thiadiazol-2-yl)acetamide, 2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[3-4-mino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[3-4-mino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio]-N-[3-4-mino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio-[3-4-mino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio-[3-4-mino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio-

vl)acetamide. 2-amino-4-{[2-(3,5-dimethyl-1H-pyrazol-1-yl)-2-oxoethyl]thio}-6-(methylthio)pyrimidine-5-carbonitrile. 2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4vllthio}-N-1.3-thiazol-2-vlacetamide. 2-(5-cvano-2-methylsulfanyl-pyrimidin-4vlsulfanyl)-N-phenyl-acetamide, 5-amino-2-methylsulfanyl-thieno[2,3-d]pyrimidine-6carboxylic acid phenylamide, 2-(6-amino-5-cyano-2-methylsulfanyl-pyrimidin-4-4.5-diamino-2-(2-methoxy-ethoxy)-thieno[2.3ylsulfanyl)-N-phenyl-acetamide, d]pyrimidine-6-carboxylic acid phenylamide. 2-(5-cyano-6-phenyl-2phenylcarbamovlmethylsulfanyl-pyrimidin-4-ylsulfanyl)-N-phenyl-acetamide, and a 2-(6-amino-3,5-dicyano-pyridin-2-ylsulfanyl)-N-phenyl-acetamide derivative.

- 22. (original) The compound according to claim 21, wherein R^4 is $-NR^{5a}R^{5b}$, wherein at least one of R^{5a} and R^{5b} is -H.
- (original) The compound according to claim 22, wherein X is selected from -O-, -N(R⁵)-, and -S(O)₀₋₂-.
- 24. (original) The compound according to claim 23, wherein Y is either - $C(R^6)R^6$ or - $N(R^5)$ -
- 25. (original) The compound according to claim 24, wherein J is either phenyl or pyridyl.
- 26. (original) The compound according to claim 25, wherein R⁴ is -NH₂.
- (original) The compound according to claim 26, wherein at least one of R¹ is selected from halo, -NO₂, -OR⁵, perfluoroalkyl, haloalkyl, and optionally substituted C₁₋₄alkyl.
- 28. (original) The compound according to claim 27, of Formula V,

wherein R¹, R³, X, and Y are as defined above; and Q is either =N- or =C(H)-.

- (original) The compound according to claim 28, wherein R^{1a} is selected from halo, lower perfluoroalkyl, -NO₂, optionally substituted -O-C₁₋₄alkyl, and optionally substituted C₁₋₄alkyl.
- 30. (original) The compound according to claim 29, wherein R^3 is selected from optionally substituted -O-C₁₋₄alkyl, -O-C₁₋₄perfluoroalkyl, optionally substituted -N(H)C₁₋₄alkyl, optionally substituted -N(C₁₋₄alkyl, and optionally substituted -S(O)₀₋₂-C₁₋₄alkyl, and optionally substituted -S(O)₀₋₂-C₁₋₄perfluoroalkyl.
- 31. (original) The compound according to claim 30, wherein Y is $-C(R^6)R^6$ -; wherein each R^6 is independently selected from -H, halogen, trihalomethyl, $-NH_2$, optionally substituted $-O-C_1$. $_4$ alkyl, optionally substituted $-N(H)C_{1-4}$ alkyl, optionally substituted $-S-C_{1-4}$ alkyl, optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.
- 32. (original) The compound according to claim 31, wherein Y is $-C(H)R^6$ -; wherein R^6 is independently selected from -H, halogen, trihalomethyl, $-NH_2$, optionally substituted $-C-C_1$ -alkyl, optionally substituted $-N(H)C_{1-4}$ alkyl, optionally substituted $-S-C_{1-4}$ alkyl, optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.
- 33. (original) The compound according to claim 32, wherein Q is =C(H)-.
- 34. (currenly amended) The compound according to claim 1, selected from Table 3.

Table 3

Entry	Name	Structure
1	2-[(3-cyano-4,6-dimethyl-5- nitropyridin-2-yl)oxy]-N-[3- (trifluoromethyl)phenyl]acetamide	O ₂ N CN CF ₃
2	N ² -(2-amino-6-chloropyrimidin-4-yl)- N-[3- (trifluoromethyl)phenyl]glycinamide N-2-(2-amino-6-chloropyrimidin-4- yl)-N-[3- (trifluoromethyl)phenyl glycinamide	H ₂ N H ₂ N H ₃ CF ₃

Table 3

Entry	Name	Structure
3	[2-amino-6-(methylthio)pyrimidin-4- yl]methyl [3- (trifluoromethyl)phenyl]carbamate	$\begin{array}{c} S \\ N \\ N \\ N \end{array} \begin{array}{c} H \\ O \\ O \end{array} \begin{array}{c} CF_3 \\ \end{array}$
4	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [5-(trifluoromethyl)pyridin-2- yl]acetamide	$\begin{array}{c c} S & CN \\ N & S & N \end{array}$ $H_2N & N & S & N & N \\ CF_3$
5	N²-[2-amino-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide N·2-[2-amino-6- (methylthio)pyrimidin 4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	H ₂ N H CF ₃
6	2-{[2-amino-6-(methylthio)pyrimidin- 4-yl]oxy}-N-[3- (trifluoromethyl)phenyl]acetamide	$\begin{array}{c} \begin{array}{ccccccccccccccccccccccccccccccccc$
7	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [3-(methyloxy)phenyl]acetamide	N H ₂ N S
8	N²-(2-amino-6-morpholin-4- ylpyrimidin-4-yl)-N-[3- (trifluoromethyl)phenyl]glycinamide N-2-(2-amino-6-morpholin-4- ylpyrimidin-4-yl)-N-[3- (trifluoromethyl)phenyl]glycinamide	$\bigcup_{N=1}^{O} \bigcup_{N=1}^{H} \bigcup_{N=1}^{CF_3}$

Table 3

Entry	Name	Structure
9	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- (4-chlorophenyl)acetamide	H ₂ N N S O C
10	2-{[2-amino-6-(1H-1,2,3-benzotriazol-1-yloxy)pyrimidin-4-yl]thio}-N-[3-(trifluoromethyl)phenyl]acctamide	NH ₂ N N N N N N N N N N N N N N N N N N N
11	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- (3-chlorophenyl)acetamide	H ₂ N N S O H
12	N ² -(2-amino-6-chloro-5- formylpyrimidin-4-yl)-N-[3- (trifluoromethylphenyl]glycinamide N-2 (2-amino-6-chloro-5- formylpyrimidin-4-yl)-N-[3- (trifluoromethylphenyl]glycinamide	CI CHO H ₂ N CF ₃
13	N ² -[2-amino-5-formyl-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide N-2-[2-amino-5-formyl-6- (methylthio)pyrimidin 4-yl]-N [3- (trifluoromethyl)phenyl]glycinamide	S CHO H CF3
14	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3-(trifluoromethyl)phenyl]acetamide	S N H ₂ N N O N F F
15	2-[(2-amino-6-chloropyrimidin-4- yl)thio]-N-[3- (trifluoromethyl)phenyl]acetamide	CI S N F F F

Table 3

Entry	Name	Structure
16	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- methyl-N-[3- (trifluoromethyl)phenyl]acetamide	H ₂ N CF ₃
17	N ² -[4-amino-6-(methylthio)-1,3,5- triazin-2-yl]-N-13- (trifluoromethylphenyl]glycinamide N-2-[4-amino-6-(methylthio)-1,3,5- triazin-2-yl]-N-13- (trifluoromethylphenyl]glycinamide	S N N N N CF3
18	N²-[4-(dimethylamino)-6- (methylthio)-1,3,5-triazin-2-yl]-N-[3- (trifluoromethyl)phenyllglycinamide N-2-[4-(dimethylamino)-6- (methylthio)-1,3,5-triazin-2-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	DE LE CERS
19	N ² -[4-(methylamino)-6-(methylthio)- 1,3,5-triazin-2-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide N-2-[4-(methylamino)-6- (methylthio)-1,3,5-triazin-2-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	
20	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyllglycinamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyllglycinamide	S CN H ₂ N CF ₃
21	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [3-(trifluoromethyl)phenyl]acetamide '2- {[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [3-(trifluoromethyl)phenyl]acetamide	NH2 NNS NH2
22	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [3-(butyloxy)phenyl]acetamide '2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [3-(butyloxy)phenyl]acetamide	NH2 NH2 NH2 NH2 NH2 NH2 NH2 NH2 NH2 NH2

Table 3

Entry	Name	Structure
23	2-{[2-amino.5-cyano.6- (methylthio)pyrimidin-4-yl]thio}-N- 1.3-benzothiazol-2-ylacetamide '2-{[2-amino.5-cyano.6- (methylthio)pyrimidin-4-yl]thio}-N- 1,3-benzothiazol-2-ylacetamide	H ₂ N S S S
24	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yllthio}-N- (5-ethyl-1,3,4-thiadiazol-2- yl)acetamide '2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yllthio}-N- (5-ethyl-1,3,4-thiadiazol-2- yl)acetamide	S-NH NH ₂
25	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- (4-methyl-1,3-thiazol-2-yl)acetamide '2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- (4-methyl-1,3-thiazol-2-yl)acetamide	NH2 N NH2 N N S
26	2-amino-4-{[2-(3,5-dimethyl-1H- pyrazol-1-yl)-2-oxoethyllthio}-6- (methylthio)pyrimidine-5-carbonitrile '2-amino-4-([2-(3,5-dimethyl-1H- pyrazol-1-yl)-2-oxoethyllthio}-6- (methylthio)pyrimidine-5-carbonitrile	N
27	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- 1,3-thiazol-2-ylacetamide '2- {[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- 1,3-thiazol-2-ylacetamide	NH ₂
28	ethyl 5-[({[2-amino-5-cyano-6- (methylthio)pyrimidin-4- yl]thio}acetyl)amino]-4-cyano-3- methylthiophene-2-carboxylate	H ₂ N N N N N N N N N N N N N N N N N N N

Table 3

Entry	Name	Structure
29	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- pyridin-2-ylacetamide	H ₂ N N S O
30	2-amino-4-({2-[2,5- bis(methyloxy)phenyl]-2- oxoethyl}thio)-6- (methylthio)pyrimidine-5-carbonitrile	H ₂ N N S O
31	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [4-fluoro-3- (trifluoromethyl)phenyl]acetamide	H ₂ N N S H CF ₃
32	2-[(2,6-diaminopyrimidin-4-yl)thio]- N-[4-fluoro-3- (trifluoromethyl)phenyl]acetamide	H ₂ N
33	2-[(2,6-diaminopyrimidin-4-yl)thio]- N-[3- (trifluoromethyl)phenyl]acetamide	H ₂ N
34	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [4-chloro-3- (trifluoromethyl)phenyl]acetamide	$\begin{array}{c} S \\ N \\ N \\ N \\ S \\ S \\ O \\ \end{array}$

Table 3

Entry	Name	Structure
35	2-amino-4-(methylthio)-6-({2-oxo-1- [3-(trifluoromethyl)phenyl]pyrrolidin- 3-yl}thio)pyrimidine-5-carbonitrile	H_2N N S
36	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [6-(trifluoromethyl)pyridin-2- yl]acetamide	H_2N N S N N S N S N N N S N N S N N N S N
37	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [4-(trifluoromethyl)pyridin-2- yl]acetamide	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
38	{6-(methylthio)-2- [(phenylmethyl)amino]pyrimidin-4- yl}methyl [3- (trifluoromethyl)phenyl]carbamate	DESCRIPTION OF THE PROPERTY OF
39	[6-(methylamino)-2- (methylthio)pyrimidin-4-yl]methyl [3- (trifluoromethyl)phenyl]carbamate	HN N CF3
40	{2-(methylthio)-6- [(phenylmethyl)amino]pyrimidin-4- yl}methyl [3- (trifluoromethyl)phenyl]carbamate	HN CF3

Table 3

Entry	Name	Structure
41	2-{[2-(acetylamino)-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [3-(trifluoromethyl)phenyl]acetamide	
42	(2S)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3- (trifluoromethyl)phenyl]propanamide	-S N F F F F F F F F F F F F F F F F F F
43	2-[(2-amino-6-chloro-5- formylpyrimidin-4-yl)thio]-N-[3- (trifluoromethyl)phenyl]acetamide	NH ₂ N N N N N N N N N N N N N N N N N N N
44	N-2-[2-amino-5-(hydroxymethyl)-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glyeinamide	NH2 N N N N N N N N N N N N N N N N N N N
45	2-{[2-amino-5-formyl-6- (methylamino)pyrimidin-4-yl]thio}- N-[3- (trifluoromethyl)phenyl]acetamide	Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z
46	2-{[2-amino-5-formyl-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3-(trifluoromethyl)phenyl]acetamide	NH ₂ N N N N N N N N N N N N N N N N N N N
47	2-{[4-amino-6-(methylthio)-1,3,5- triazin-2-yl]oxy}-N-[3- (trifluoromethyl)phenyl]acetamide	S N N N F F

Table 3

Entry	Name	Structure
48	2-{[2-amino-6-(methylthio)pyrimidin- 4-yl]thio}-N-[3- (trifluoromethyl)phenyl]acetamide	S N N N N N N N N N N N N N N N N N N N
49	2-amino-4-(methylthio)-6-{{2-oxo-2- (3-oxo-3,4-dihydro-2H-1,4- benzoxazin-6- yl)ethyl]thio}pyrimidine-5- carbonitrile	S N N N N N N N N N N N N N N N N N N N
50	2-[(2-amino-6-chloro-5- formylpyrimidin-4-yl)oxy]-N-[3- (trifluoromethyl)phenyl]acetamide	NH ₂ O N F F
51	2-{[2-amino-5-formyl-6- (phenylthio)pyrimidin-4-yl]thio}-N- [3-(trifluoromethyl)phenyl]acetamide	S S N H F F F
52	2-{[2-amino-5-(hydroxymethyl)-6-(phenylthio)pyrimidin-4-yl]thio}-N-[3-(trifluoromethyl)phenyl]acetamide	S S N N F F F
53	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [2-methyl-3- (trifluoromethyl)phenyl]acetamide	H ₂ N N S N H F F
54	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [2-(methyloxy)-5- (trifluoromethyl)phenyl]acetamide	H ₂ N N H O CF ₃

Table 3

- ·	Table	
Entry	Name	Structure
55	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [2-chloro-5- (trifluoromethyl)phenyl]acetamide	H ₂ N N S N C I
56	2-{[2-amino-5-(hydroxymethyl)-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3-(trifluoromethyl)phenyl]acetamide	NH ₂
57	N²-(6-amino-1H-pyrazolo[3,4-d]pyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]glycinamide N-2-(6-amino-1H-pyrazolo[3,4-d]pyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]glycinamide	NH ₂ NH ₂ NH ₂ NH ₃ NH ₄
58	N²-[2-amino-5-[(E)- hydrazonomethyl]-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide N-2-[2-amino-5-[(E)- hydrazonomethyl]-6- (methylthio)pyrimidin-4-yl] N-[3- (trifluoromethyl)phenyl]glycinamide	NH ₂ NH
59	N²-[2-amino-5-[(E)- (hydroxyimino)methyl]-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide N-2-[2-amino-5-[(E)- (hydroxyimino)methyl] 6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	NH ₂ NH ₂ NH ₂ NH ₃ NH ₄ NH ₅ NH ₆ NH ₆ NH ₇
60	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	NH ₂ N N N N N N N N N N N N N N N N N N N

Table 3

Entry	Name	Structure
61	2-{[2-amino-5-cyano-6- (methylamino)pyrimidin-4-yl]thio}- N-[3- (trifluoromethyl)phenyl]acetamide	NH N S S F F
62	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [2-amino-5- (trifluoromethyl)phenyl]acetamide	H ₂ N N N N N N N N N N N N N N N N N N N
63	2-amino-4-(methylthio)-6-({[6- (trifluoromethyl)-1H-benzimidazol-2- yl]methyl}thio)pyrimidine-5- carbonitrile	H ₂ N N N N F F
64	2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]hydrazinecar boxamide	H ₂ N H H H F F
65	N ² -[5-cyano-2-(methylamino)-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide N-2-[5-cyano-2-(methylamino)-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	TZ Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z
66	2-{[2-amino-5-cyano-6- (dimethylamino)pyrimidin-4-yl]thio}- N-[3- (trifluoromethyl)phenyl]acetamide	H ₂ N S H F F
67	(S)-1-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]prolinamide	H ₂ N N N F F

Table 3

Entry	Name	Structure
68	(2R)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3- (trifluoromethyl)phenyl]propanamide	-S N F F F F F F F F F F F F F F F F F F
69	1-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-N- [3- (trifluoromethyl)phenyl]cyclopropane carboxamide	N N N N N N N N N N N N N N N N N N N
70	(2S)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]oxy}-3- methyl-N-[3- (trifluoromethyl)phenyl]butanamide	H ₂ N O HN F F
71	N²-[5-cyano-2-(dimethylamino)-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide N-2-[5-cyano-2-(dimethylamino)-6- (methylthio)pyrimidin 4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	
72	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N²- methyl-N-[3- (trifluoromethyl)phenyl]glycinamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2- methyl-N-[3- (trifluoromethyl)phenyl]glycinamide	S N H ₂ N N O F F
73	1-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]amino}- N-[3- (trifluoromethyl)phenyl]cyclopropane carboxamide	-S H O N F F F

Table 3

Entry	Name	Structure
74	N²-[2-amino-5-cyano-6- (methylsulfinyl)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (methylsulfinyl)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	S ^{SO} N H ₂ N H ₂ N F F
75	N²-[2-amino-5-cyano-6- (methylsulfonyl)pyrimidin-4-yl]-N- [3-(trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (methylsulfonyl)pyrimidin-4-yl]-N- [3-(trifluoromethyl)phenyl]-L- alaninamide	OSSO N N N N N N N N N N N N N N N N N N N
76	N²-(5-cyano-2-morpholin-4- ylpyrimidin-4-yl)-N-[3- (trifluoromethylphenyl]glycinamide N-2-(5-cyano-2-morpholin-4- ylpyrimidin-4-yl) N-[3- (trifluoromethyl)phenyl]glycinamide	N N N N N N N N N N N N N N N N N N N
77	2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]thio}-N- [3,5- bis(trifluoromethyl)phenyl]acetamide	H ₂ N CF ₃
78	N²-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (methyloxy)pyrimidin 4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	N H ₂ N CF ₃

Table 3

Entry	Name	Structure
79	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[2- (methyloxy)-5- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[2- (methyloxy)-5- (trifluoromethyl)phenyl]-L- alaninamide	H ₂ N N H CF ₃
80	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[2- chloro-5-(trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[2- chloro-5-(trifluoromethyl)phenyl]-L- alaninamide	S N H ₂ N CF ₃
81	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-2- methyl-N-[3- (trifluoromethyl)phenyl alaninamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-2- methyl-N-[3- (trifluoromethyl-phenyl alaninamide	S N H ₂ N CF ₃
82	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-{3-[(4- methylpiperazin-1- yl)carbonyl]phenyl]-L-alaninamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-{3-[(4- methylpiperazin-1- yl)carbonyl[phenyl]-L-alaninamide	S CN H CN H CN
83	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-D- alaninamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-D- alaninamide	N H ₂ N CF ₃

Table 3

Entry	Name	Structure
84	2-[(2-amino-5-cyano-6-morpholin-4-ylpyrimidin-4-yl)thio]-N-[3-(trifluoromethyl)phenyl]acetamide	NH ₂ NH ₂ S NH N F F
85	(R)-1-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]prolinamide	S N O N F F F
86	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide	NH2 NH2NNN H CF3
87	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N ² -[2- (dimethylamino)ethyl]-N-[3- (trifluoromethyl)phenyl[glycinamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2-[2- (dimethylamino)ethyl]-N-[3- (trifluoromethyl)phenyl[glycinamide	S CN H ₂ N CF ₃
88	N²-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	CN H ₂ N N N CF ₃
89	N²-(2,6-diamino-5-cyanopyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide N-2-(2,6-diamino-5-cyanopyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	NH ₂ CN H CF ₃

Table 3

Entry	Name	Structure
90	N ² -(2-amino-5-cyanopyrimidin-4-yl)- N-[3-(trifluoromethyl)phenyl]-L- alaninamide N-2-(2-amino-5-cyanopyrimidin-4- yl)-N-[3-(trifluoromethyl)phenyl]-L- alaninamide	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
91	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]N-2- methyl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin 4-yl]-N-2- methyl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	$\begin{array}{c} S \\ N \\ N \\ N \end{array} \begin{array}{c} CN \\ N \\ N \end{array} \begin{array}{c} H \\ CF_3 \end{array}$
92	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3-[2- (diethylamino)ethyl]oxy] phenyl)-L- alaninamide N-2 [2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3-[[2- (diethylamino)ethyl]oxy] phenyl)-L- alaninamide	
93	2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-1,2- dimethyl-N-[3- (trifluoromethyl)phenyl]hydrazinecar boxamide	/s
94	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- amino-5-(trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl] N-[3- amino-5-(trifluoromethyl)phenyl]-L- alaninamide	$\begin{array}{c} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$

Table 3

Entry	Name	Structure
95	ethyl [1-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-2-({[3- (trifluoromethyl)phenyl]amino}carbo nyl)hydrazino]acetate	S CN H CF3
96	2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-2- methyl-N-[3- (trifluoromethyl)phenyl]hydrazinecar boxamide	H ₂ N N N N T CF ₃
97	3,5-diamino-4,6-dimethyl-N-[3- (trifluoromethyl)phenyl]furo[2,3- b]pyridine-2-carboxamide	H ₂ N NH ₂ CF ₃
98	3-amino-4,6-dimethyl-5-nitro-N-[3- (trifluoromethyl)phenyl]furo[2,3- b]pyridine-2-carboxamide	$\begin{array}{c c} O_2N & & NH_2 \\ & & \\ & & \\ O & & \\ \end{array}$
99	N²-(2-amino-5-cyano-6- hydroxypyrimidin-4-yl)-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2 (2-amino-5-cyano-6- hydroxypyrimidin-4-yl)-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	OH CN H CF3
100	N²-[5-cyano-2-(methylthio)pyrimidin- 4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide N-2-[5-cyano-2- (methylthio)pyrimidin 4-yl]-N-[3- (trifluoromethyl)phenyl]glycinamide	S N N H CF3

Table 3

Entry	Name	Structure
101	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N²- (tetrahydro-2H-pyran-4-ylmethyl)-N- [3- (trifluoromethyl)phenyl]glycinamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2- (tetrahydro-2H-pyran-4-ylmethyl)-N- [3- (trifluoromethyl)phenyl]glycinamide	S CN H ₂ N CF ₃
102	N²-(2-amino-5-cyano-6-{[2- (dimethylamino)ethyl)oxy pyrimidin- 4-yl)-N-[3-(trifluoromethyl)phenyl]- L-alaninamide N-2-(2-amino-5-cyano-6-{[2- (dimethylamino)ethyl)oxy pyrimidin- 4-yl)-N-[3-(trifluoromethyl)phenyl]- L-alaninamide	-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N
103	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N ⁶ - [[(1,1-dimethylethyl)oxy]carbonyl]- N-[3-(trifluoromethyl)phenyl]-L- lysinamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-6- [[(1,1-dimethylethyl)oxy]carbonyl]- N-[3-(trifluoromethyl)phenyl]-L- lysinamide	SH2 NH 1-Bu NH 1-Bu NH
104	2-amino-4-(methylthio)-6- (methyl {(1S)-1-[6-(trifluoromethyl)- 1H-benzimidazol-2- yl]ethyl}amino)pyrimidine-5- carbonitrile	NH ₂ NC NH ₂ NC

Table 3

Entry	Name	Structure
105	N ² -[2-amino-5-cyano-6- (methylthio]pyrimidin-4-yl]-N ² -[2- (tetrahydro-2H-pyran-4-yl)ethyl]-N- [3- (trifluoromethyl)phenyl]glycinamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2-[2- (tetrahydro-2H-pyran-4-yl)ethyl]-N- [3-	NH ₂
106	(trifluoromethyl)phenyl]glycinamide N²-[2-amino-5-cyano-6- (methyltho)pyrimidin-4-yl]-N-[3-{[2- (diethylamino)ethyl]amino}-5- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3-{[2- (diethylamino)ethyl]amino]-5- (trifluoromethyl)phenyl]-L- alaninamide	NH2 NH
107	2-amino-4-(methylthio)-6-({(1S)-1- [6-(trifluoromethyl)-1H- benzimidazol-2- yl]ethyl}amino)pyrimidine-5- carbonitrile	-S NH NH FF
108	2-{2-amino-5-cyano-6-[1-(3- trifluoromethyl-phenylcarbamoyl)- 1S-ethylamino]-pyrimidin-4- ylamino}-N-(3-trifluoromethyl- phenyl)-2S-propionamide	HN CF 3 CF 3 CF 3
109	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yll-N²- methyl-N-(3- methylphenyl)glycinamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yll-N-2- methyl-N-(3- methylphenyl)glycinamide	NH ₂

Table 3

Entry	Name	Structure
110	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N ² - methyl-N-[3-(1- methylethyl)phenyl]glycinamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl] N-2- methyl-N-[3-(1- methylthylphenyl]glycinamide	NH ₂ NH ₂ NH ₂ NH ₂ NH ₂ NH ₃
111	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N⁵- [imino(nitroamino)methyl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide N-2 [2-amino 5-cyano-6- (methylthio)pyrimidin 4-yl]-N-5- [imino(nitroamino)methyl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide	NH ₂ N NO ₂ CF ₃
112	methyl 3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-5- (trifluoromethyl)benzoate	NH ₂ N N N N N N N N N N N N N N N N N N N
113	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3- nitrophenyl)-1-alaninamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3- nitrophenyl)-1-alaninamide	NH ₂ NH ₂ NH ₂ NO ₂
114	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- lysinamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- lysinamide	NH ₂ NH ₂ NH ₂ NH ₂ CF ₃

Table 3

Entry	Name	Structure
115	N ² -[2-amino-5-cyano-6- (propyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (propyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	NH ₂ NH ₂ NH ₂ NH ₂ NH ₂ NH ₃ NH ₄ NH ₄ NH ₅ CF ₃
116	N²-[5-cyano-2-{[2- (methyltoxy)ethyl]amino}-6- (methylthio pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2-[5-eyano-2-{[2- (methyloxy)ethyl]amino}-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	HN O H CF3
117	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- argininamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- argininamide	NH2 NH2 NH CF3
118	N²-[2-amino-5-cyano-6- (methylsulfinyl)pyrimidin-4-yl]-N²- methyl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (methylsulfinyl)pyrimidin-4-yl]-N-2- methyl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	NH ₂

Table 3

Entry	Name	Structure
119	N²-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N²- methyl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-2- methyl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	NH ₂ N N N N CF ₃
120	N²-[2-amino-5-cyano-6- (propyloxy)pyrimidin-4-yl]-N²- methyl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (propyloxy)pyrimidin-4-yl]-N-2- methyl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	NH ₂ NH ₂ NH ₂ NH ₂ CF ₃
121	N ² -[2-amino-5-cyano-6- (cthyloxy)pyrimidin-4-yl]-N ² -methyl- N-[3-(trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-2- methyl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	NH ₂ N N N N CN CF ₃
122	N²-(2-amino-5-cyano-6-[(1-methylethyl)oxy]pyrimidin-4-y]-N- [3-(trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6-[(1-methylethyl)oxy]pyrimidin-4-y]-N- [3-(trifluoromethyl)phenyl]-L- alaninamide	NH ₂ N N N N N N N N N N N N N N N N N N N

Table 3

Entry	Name	Structure
123	N ⁵ -acetyl-N ² -[2-amino-5-cyano-6- (methylthio]pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide N-5-acetyl-N-2-[2-amino-5-cyano-6- (methylthio]pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide	NH ₂ CF ₃
124	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3- aminophenyl)-L-alaninamide N-2-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3- aminophenyl)-L-alaninamide	S NH2 NH2 NH2 NH2 NH2
125	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-N-[2- (dimethylamino)ethyl]-5- (trifluoromethyl)benzamide	NH ₂ NH
126	2-(methyloxy)ethyl ((48)-4-{[2- amino-5-cyano-6- (methylthio)pyrimidin-4-yl]amino}-5- oxo-5-{[3- (trifluoromethyl)phenyl]amino}pentyl)carbamate	SHOO CF3
127	2-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]hydrazinecar boxamide	NH2 N H H H CF3
128	1,1-dimethylethyl ((4S)-4-{[2-amino- 5-cyano-6-(ethyloxy)pyrimidin-4- yl]amino}-5-oxo-5-{[3- (trifluoromethyl)phenyl]amino}pentyl)carbamate	NH ₂ H CF ₃

Table 3

Entry	Name	Structure
129	N-2-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide	NH ₂ NH ₂ NH ₂ NH ₂ CF ₃
130	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N- methyl-L-alanyl}amino)-N-[2- (dimethylamino)ethyl]-5- (trifluoromethyl)benzamide	Chiral CH ₃ H CH ₃ H CH ₃ CH
131	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N- methyl-L-alanyl]amino)-N-[3-(4- methylpiperazin-1-yl)propyl]-5- (trifluoromethyl)benzamide	SCH ₃ N Chiral Page 10 Ch ₃ H CH ₃ H CF ₃ H ₃ C N N N N N N N N N N N N N
132	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yll-N²- methyl-N-{3- [(trifluoromethyl)oxylphenyl}-L- alaninamide N-2- [2 amino 5-eyano 6- (methylthio)pyrimidin-4-yl]-N-2- methyl-N-{3- [(trifluoromethyl)oxylphenyl}-L- alaninamide	Chiral Chiral N Chira

Table 3

Entry	Name	Structure
133	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-(3- bromophenyl)-N²-methyl-L- alaninamide N-2[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl] N (3- bromophenyl) N - 2methyl-L- alaninamide	H ₃ C·S N Ch ₃ H H ₂ N CH ₃ O CH ₃ O CH ₃ O
134	N²-[2-amino-5-cyano-6- (methylthio]pyrimidin-4-yl]-N-{2- {[2-d(imethylamino)ethyl]oxy}-5- [(trifluoromethyl)oxy]phenyl}-N²- methyl-L-alaninamide N-2- [2 amino 5-eyano-6- (methylthio)pyrimidin-4-yl]-N-{2- {{2-d(imethylamino)ethyl oxy}-5- {{trifluoromethyl}oxy]phenyl}-N-2- methyl-L-alaninamide	H ₂ N CH ₃ N F F
135	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N- methyl-L-alanyl}amino)-N-(2- morpholin-4-ylethyl)-5- (trifluoromethyl)benzamide	S·CH ₃ Chiral CH ₃ H CF ₃ H ₂ N CH ₃ O
136	N²-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N²-methyl- N-[3-(trifluoromethyl)phenyl]-L- lysinamide N-2[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-2 methyl-N-[3- (trifluoromethyl)phenyl]-L- lysinamide	CH ₃ NH ₂ Chiral

Table 3

Entry	Name	Structure
137	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3-:[2- (dimethylamino)ethyl)[oxy]-5- (tirifluoromethyl)phenyl]-L- alaninamide N-2- [2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3-[(2- (dimethylamino)ethyl]oxy]-5- (tirifluoromethyl)phenyl]-L- alaninamide	H ₂ N N N H O F F CH ₃ CH ₃ CH ₃ CH ₃
138	(2S)-2-{[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]amino}-3- oxo-3-{[3- (trifluoromethyl)phenyl]amino}propyl acetate	H ₃ C·S CN CH ₃ Chiral
139	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N¹-[3- (trifluoromethyl)phenyl]-L- glutamamide N-2-[2-amino-5-eyano-6- (methylthio)pyrimidin 4-yl] N-1[3- (trifluoromethyl)phenyl]-L- glutamamide	H ₃ C·S H ₂ N O Chiral
140	2-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]hydrazinecar boxamide	H ₃ C. N H H H H H H H H H H H H H H H H H H
141	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-N-hydroxy-5- (trifluoromethyl)benzamide	Chiral Chiral P. CF ₃ H. CF ₃ H. CO

Table 3

Entry	Name	Structure
142	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-3- (dimethylamino)-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2- [2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-3- (dimethylamino)-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	H ₃ C·S Christ N-CH ₃ H ₂ N N-CH ₃ F F
143	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl-5- morpholin-4-yl-N-[3- (trifluoromethyl)phenyll-L- norvalinamide N-2- [2-amino-5-eyano-6- (methylthio)pyrimidin-4-yl-5- morpholin-4-yl-N-[3- (trifluoromethyl)phenyl]-L- norvalinamide	H ₃ C·S H ₂ N H F F
144	N²-[2-amino-5-cyano-6- (methylthio]pyrimidin-4-vll-N³-[2- (methyloxy)ethyl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide N-2-[2-amino-5-eyano-6- (methylthio)pyrimidin-4-yl]-N-5-[2- (methyloxy)ethyl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide	NH CF ₃
145	3-({N-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-L- alanyl}amino)-5- (trifluoromethyl)benzoic acid	Chiral Chiral Chiral P. CF3 H

Table 3

Entry	Name	Structure
146	methyl N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-α- glutaminate methyl N-2- [2-amino-5-cyano-6- (methylthio)pyrimidin 4-yl] N-[3- (trifluoromethyl)phenyl]-L-alpha- glutaminate	H ₃ C·SH ₃ C·OOO Chral
147	N ⁵ -(aminocarbonyl)-N ² -[2-amino-5- cyano-6-(methylthio)pyrimidin-4-yl]- N-[3-(trifluoromethyl)phenyl]-L- ornithinamideN-5(aminocarbonyl)- N-2-[2-amino-5-eyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide	SMe NH F F
148	N²-[2-amino-5-cyano-6- (cthyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- omithinamideN-2[2-amino-5- eyano-6-(ethyloxy)pyrimidin 4-yl]-N- [3-(trifluoromethyl)phenyl]-L- ornithinamide	Chiral Chiral
149	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-a- glutamine N-2- [2-amino-5-eyano-6- (methylthio)pyrimidin-4-yl] N-[3- (trifluoromethyl)phenyl] L-alpha- glutamine	H ₃ C·S HO O Chiral H ₂ N N N CF ₃
150	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- scrinamide N-2- [2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- serinamide	CH ₃ Christ

Table 3

Entry	Name	Structure
151	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-O- (phenylmethyl)-N-[3- (trifluoromethyl)phenyl]-L- serinamide N-2[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-O- (phenylmethyl) N-[3- (trifluoromethyl)phenyl]-L- serinamide	Chral Chral Chral Chral Chral
152	N²-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-y]]-N-[3- (trifluoromethyl)phenyl]-L- argininamide N-2[2-amino-5-eyano-6- (ethyloxy)pyrimidin 4-y]] N-[3- (trifluoromethyl)phenyl] L- argininamide	CH ₃ H ₂ N NH Chiral
153	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N²- methyl-N²- [(phenylmethyl)oxy]earbonyl}-N-[3- (trifluoromethyl)phenyl]-L- lysinamide N-2- [2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-2- methyl-N-6 [(phenylmethyl)oxy]earbonyl]-N-[3- (trifluoromethyl)phenyl]-L- lysinamide	Chiral Chiral Chiral
154	Nalpha-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- tyrosinamide	H ₃ C O CN H Chral

Table 3

Entry	Name	Structure
155	N ⁵ -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide N-5[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide	H ₃ C·s N HN O NH ₂
156	N ² [2-amino-5-cyano-6- (cthyloxy)pyrimidin-4-yl]-N ⁶ ,N ⁶ - dimethyl-N-[3- (trifluoromethyl)phenyl]-L- lysinamide N-2- [2-amino-5-eyano-6- (ethyloxy)pyrimidin-4-yl]- N-6-,N-6-dimethyl-N-[3- (trifluoromethyl)phenyl]-L- lysinamide	H ₂ N N H F F
157	N²-[2-amino-5-cyano-6- (cthyloxy)pyrimidin-4-yl]-N-[3-[(4- methylpiperazin-1-yl)earbonyl]-5- (trifluoromethyl)phenyl]-L- alaninamide N-2- [2-amino-5-eyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3-[(4- methylpiperazin-1-yl)earbonyl]-5- (trifluoromethyl)phenyl]-L- alaninamide	Chiral Chiral H ₂ N N CF ₃ Chiral H ₃ C.N N O
158	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L- alanyl} amino)-N-(3-pyrrolidin-1- ylpropyl)-5- (trifluoromethyl)benzamide	Chiral Ch

Table 3

Entry	Name	Structure
159	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L- alanyl}amino)-N-(2-morpholin-4- ylethyl)-5-(trifluoromethyl)benzamide	CH ₃ Chiral
160	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L- alanyl}amino)-N-[2- (dimethylamino)ethyl]-5- (trifluoromethyl)benzamide	Chiral Chiral Chiral Chiral Chiral Chiral Chiral Chiral
161	3-({N-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-L- alanyl}amino)-N-[2-4- methylpicrazin-1-yl)propyl]-5- (trifluoromethyl)benzamide	Chiral Chiral Chiral Chiral CF3 H ₂ N N N N N N N N N N N N N

Table 3

Entry	Name	Structure
162	N²-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N²-methyl- N²-{[(phenvlmethyl)oxy carbonyl}- N-[3-(trifluoromethyl)phenyl]-L- lysinamide N-2- [2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-2- methyl-N-6 {[(phenylmethyl)oxy carbonyl]-N-[3- (trifluoromethyl)phenyl]-L- lysinamide	Chiral Chiral
163	1,1-dimethylethyl ((4S)-4-{[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]amino}-5-oxo-5-{[3-(trifluoromethyl)phenyl]amino}pentyl)carbamate	H ₃ C _C CH ₃ Chiral
164	(2S)-2-{[2-amino-5-cyano-6- (cthyloxy)pyrimidin-4-yl]amino}-3- oxo-3-{[3- (trifluoromethyl)phenyl]amino}propyl acctate	CH ₃ Chiral
165	phenylmethyl N²-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-α-glutaminate phenylmethyl N²-2-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutaminate	CH ₃ O O CN H CF ₃

Table 3

Entry	Name	Structure
166	N ² .N ³ -diacetyl-N ² -[2-(acetylamino)- 5-cyano-6-(methylthio)pyrimidin-4- yl]-N-[3-(trifluoromethyl)phenyl]-L- ornithinamide N-2-,N-5-diacetyl-N-2-[2- (acetylamino) 5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide	O CH ₃ Chiral O CH ₃ CH ₃ NH H ₃ C N N N CF ₃
167	2-(methyloxy)ethyl ((48)-4-{[2- amino-5-cyano-6- (methylthio)pyrimidin-4-yl]amino}-5- oxo-5-{[3- (trifluoromethyl)phenyl]amino}pentyl)carbamate	S.CH ₃ NH H ₂ N CF ₃
168	N²-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-5- morpholin-4-yl-N-[3- (trifluoromethyl)phenyl]-L- norvalinamide N-2- [2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-5- morpholin-4-yl-N-[3- (trifluoromethyl)phenyl]-L- norvalinamide	Chral
169	N-((4S)-4-{[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]amino}-5- oxo-5-{[3- (trifluoromethyl)phenyl]amino}pentyl)-N,N-dimethylmethanaminium	CH ₃ CH ₃ Chral
170	Methyl N²-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-a- glutaminate Methyl N-2- [2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha- glutaminate	CH ₃ Chiral Chi

Table 3

Entry	Name	Structure
171	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yll-N ⁶ .N ⁶ - dimethyl-N-[3- (trifluoromethyl)phenyl]-L- lysinamide N-2[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]- N-6-,N-6dimethyl-N-[3- (trifluoromethyl)phenyl]-L- lysinamide	H ₃ C. _N .CH ₃ Chiral
172	N ² -[2-amino-5-cyano-6- (cthyloxy)pyrimidin-4-yl]-N ² -methyl- N-{3-[(trifluoromethyl)oxy]phenyl}- L-alaninamide N-2-[2-amino-5-eyano-6- (ethyloxy)pyrimidin-4-yl]-N-2- methyl-N-{3- [(trifluoromethyl)oxy]phenyl}-L- alaninamide	Chiral Ch
173	N²-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-a- glutamine N-2- [2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-alpha- glutamine	CH ₃ HO O CHrel
174	N²-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-(3- bromophenyl)-N²-methyl-L- alaninamide N-2[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N (3- bromophenyl)-N-2methyl-L- alaninamide	Chinal
175	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N ¹ -[3- (trifluoromethyl)phenyl]-L- glutamamide N-2[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-1[3- (trifluoromethyl)phenyl]-L- glutamamide	Chral

Table 3

Entry	Name	Structure
176	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-3- (dimethylamino)-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-3- (dimethylamino)-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	CH ₃ Chral Chral Chral Chral
177	2-(2-amino-5-cyano-6- cthoxypyrimidin-4-ylamino)-5- hydrazinyl-5-oxo-N-(3- (trifluoromethyl)phenyl)pentanamide Structure possibly contains amino acid derivative which is not supported in current version!	CH ₃ NH ₂ Chiral
178	N²-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-3- (dimethylamino-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2- [2-amino-5-eyano-6- (methyloxy)pyrimidin 4-yl]-3- (dimethylamino) N-[3- (trifluoromethyl)phenyl]-L- alaninamide	H ₃ C. O Chral
179	N²-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-vl]-N-[3-;[2- (dimethylamino)ethyl]oxy]-5- (tirifluoromethyl)phenyl]-L- alaninamide N-2[2-amino-5-eyano-6- (methyloxy)pyrimidin-4-yl]-N-[3-{[2- (dimethylamino)ethyl]oxy]-5- (tirifluoromethyl)phenyl]-L- alaninamide	H ₂ N N F F CH ₃ N Chiral

Table 3

Entry	Name	Structure
180	N²-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3-{[2- (dimethylamino)ethyl]oxyl-5- (trifluoromethyl)phenyl]-L- alaninamide N-2- [2-amino-5-eyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3-{[2- (dimethylamino)ethyl]oxyl-5- (trifluoromethyl)phenyl]-L- alaninamide	Chiral Chiral P F F F F F F F F F F F F F F F F F F
181	N²-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-v]l-N-(3- bromophenyl)-N²-methyl-L- alaninamide N-2- [2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl] N (3- bromophenyl) N 2 methyl-L- alaninamide	H ₃ C. O CNCH ₃ H H ₂ N N N N N Br CH ₃ O Br
182	phenylmethyl N²-[2-amino-5-cyano- 6-(methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L-α- glutaminate phenylmethyl N-2- [2-amino-5- cyano-6 (methylthio)pyrimidin-4-yl]- N-[3 (trifluoromethyl)phenyl] L- alpha-glutaminate	H ₃ C·s O O H ₂ N N H CF ₃
183	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-O- (phenylmethyl)-N-[3- (trifluoromethyl)phenyl]-L- serinamide N-2- [2-amino-5-eyano-6- (methylthio)pyrimidin-4-yl]-O- (phenylmethyl)-N-[3- (trifluoromethyl)phenyl]-L- serinamide	H ₃ C. _S CNO H CF ₃

Table 3

Entw-	Name	
Entry	- (Structure
184	N ² -[2-amino-5-cyano-6- (methylthiopyrimidin-4-yl]-N ³ .N ⁵ - bis[2-(methyloxy)ethyl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide N-2- [2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]- N-5-,N-5bis[2-(methyloxy)ethyl]- N-[3-(trifluoromethyl)phenyl]-L- ornithinamide	CH ₃ CH ₃ Chral
185	1,1-dimethylethyl ((4S)-4-{[2-amino-5-cyano-6-(methyloxy)pyrimidin-4-yl]amino}-5-oxo-5-{[3-(trifluoromethyl)phenyl]amino}pentyl)carbamate	H ₂ N N N N CFG ₃
186	N ⁵ -acetyl-N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide N-5-aeetyl N-2- [2-amino-5- eyano-6-(ethyloxy)pyrimidin-4-yl] N- [3-(trifluoromethyl)phenyl] L- ornithinamide	CH ₃ O ₂ CH ₃ Crimil
187	N ⁵ -acetyl-N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide N-5-aeetyl-N-2-[2-amino-5- cyano-6 (methylthio)pyrimidin-4-yl]- N-[3-(trifluoromethyl)phenyl]-L- ornithinamide	O CH ₃ Crinii
188	N²-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N²- methyl-N-13- [(trifluoromethyl)oxy]phenyl}-L- alaninamide N-2-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-N-2- methyl-N-13- [(trifluoromethyl)oxy]phenyl}-L- alaninamide	CH ₃ N CH ₃ H OCF ₃

Table 3

Entry	Name	Structure
189	methyl 3-({N-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-L- alanyl}amino)-5- (trifluoromethyl)benzoate	CH ₃ H ₂ N H CF ₃ H ₂ N CF ₃ CH ₃ H
190	3-({N-[2-amino-5-cyano-6- (methyloxy)pyrimidin-4-yl]-L- alanyl}amino)-N-[2- (dimethylamino)ethyl]-5- (trifluoromethyl)benzamide	Chiral
191	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-3- morpholin-4-yl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2- [2-amino-5-eyano-6- (methylthio)pyrimidin-4-yl]-3- morpholin-4-yl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	H ₃ C·s Criral
192	N ² -[2-amino-5-cyano-6- (methyloxylpytrimidin-4-yl]-3- morpholin-4-yl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide N-2- [2 amino 5-cyano 6- (methyloxylpytrimidin-4-yl]-3- morpholin-4-yl-N-[3- (trifluoromethyl)phenyl]-L- alaninamide	H ₃ C. Chiral

Table 3

Entry	Name	Structure
193	N ² -[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-3- morpholin-4-yl-N-[3- (trifluoromethy)]phenyl]-L- alaninamide N-2-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-3- morpholin-4-yl-N-[3- (trifluoromethy))phenyl]-L- alaninamide	CH3 CHral
194	N³-(aminocarbonyl)-N²-[2-amino-5- cyano-6-(cthyloxy)pyrimidin-4-yl]-N- [3-(trifluoromethyl)phenyl]-L- ornithinamide N-5- (aminocarbonyl) N-2-[2- amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl] L- ornithinamide	ONH2 Chiral
195	N²-[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-D- lysinamide N-2- [2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-D- lysinamide	SMe H ₂ N N H ₂ Chiral
196	N²-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-N-[3- (trifluoromethyl)phenyl]-D- lysinamide N-2- [2-amino-5-eyano-6- (ethyloxy)pyrimidin 4-yl]-N-[3- (trifluoromethyl)phenyl]-D- lysinamide	OEt NH ₂ Chiral
197	N ² -[2-amino-5-cyano-6- (ethyloxylpyrimidin-4-yl]-O-methyl- N-[3-(trifluoromethyl)phenyl]-L- scrinamide N-2-[2-amino-5-cyano-6- (ethyloxy)pyrimidin-4-yl]-O-methyl- N-[3-(trifluoromethyl)phenyl]-L- serinamide	CH ₃ Chral

Table 3

Entry	Name	Structure
198	N ² -[2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N ⁵ - (methylsulfonyl)-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide N-2- [2-amino-5-cyano-6- (methylthio)pyrimidin-4-yl]-N-5- (methylsulfonyl)-N-[3- (trifluoromethyl)phenyl]-L- ornithinamide	CH ₃ O=S=O NH NH NH OCF ₃

- 35. (previously presented) A pharmaceutical composition comprising the compound according to claim 1 and a pharmaceutically acceptable carrier.
- (previously presented) A metabolite of the compound or the pharmaceutical composition according to claim 1.
- 37. (previously presented) A method of modulating the *in vivo* activity of a kinase, the method comprising administering to a subject an effective amount of a composition comprising a compound according to claim 1 and/or a compound explicitly provided against in claim 1.
- 38. (original) The method according to claim 37, wherein the kinase is p70S6K.
- (original) The method according to claim 38, wherein modulating the *in vivo* activity of p7086K comprises inhibition of p7086K.
- 40. (previously presented) A method of treating diseases or disorders associated with uncontrolled, abnormal, and/or unwanted cellular activities, the method comprising administering, to a mammal in need thereof, a therapeutically effective amount of a composition comprising a compound according to claim 1 and/or a compound explicitly provided against in claim 1.
- 41. (previously presented) A method of screening for modulator of a p70S6 kinase, the method comprising combining either a compound according to claim 1 or a compound explicitly provided against in claim 1, and at least one candidate agent and determining the effect of the candidate agent on the activity of said kinase.

- 42. (previously presented) A method of inhibiting proliferative activity in a cell, the method comprising administering an effective amount of: the compound according to claim 1 and/or a compound explicitly provided against in claim 1.
- 43. (previously presented) A method of inhibiting abnormal metabolic activity in a cell, the method comprising administering an effective amount of: the compound according to claim 1 and/or a compound explicitly provided against in claim 1.